



STAFFORDSHIRE COUNTY COUNCIL.

Annual Report

OF THE

MEDICAL OFFICER OF HEALTH,

GEORGE REID, O.B.E., M.D., D.P.H.,

For the Year 1919.

STAFFORD :

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Staffordshire County Council.

Annual Report of the Medical Officer of Health.

Preliminary Note.

I regret that the presentation of this, my Thirty-first Annual Report, has been so long delayed, but the delay was unavoidable owing to the fact that some of the reports did not reach me until nearly the end of the year.

On this occasion the reports of the various medical officers of health contain references to matters which for the previous few years were omitted, but for two reasons I do not propose to summarise the reports as was customary previous to the war, first because of the very high cost of printing, and secondly because such a summary would not lead to any useful purpose at present having regard to the fact that the County Council could hardly take any action upon the reports which would lead to expenditure at the present time. A complete summary of the reports has been made which will be kept for future reference and action if need be.

The reports give considerable prominence to the question of housing, and to that extent I shall deal with them by introducing certain figures, which will be found in the form of a table at the end of the report, showing the number of houses that are required in the various districts in the immediate future in order to remedy existing overcrowding.

In addition to publishing the usual statistics I also introduce a short summary of the work carried on by the Public Health and Health Visiting Committees for the twelve months ending June 30th, 1920, together with special summary tables dealing with the more important statistics.

GEO. REID,
County Medical Officer of Health.

Stafford,
March, 1921.

Summary of the Year's Work.

SUMMARY OF YEAR'S WORK OF THE PUBLIC HEALTH COMMITTEE OF THE COUNTY COUNCIL AND THE CENTRAL AUTHORITY FOR HEALTH VISITING.

The County health visiting scheme, embracing a joint area in which the local authorities had not previously established schemes, has been carried on most successfully as will be seen from the table of work done which is introduced as an appendix to this report.

In my last annual summary I referred to the joint scheme which had been approved by the County Council and the County Education Committee for greatly extending the work and for establishing Infant Welfare Centres and School Clinics. Very satisfactory progress has been made in this direction, and, up to the period covered by this report, we had established two school clinics and welfare centres, namely, at Willenhall and Sedgley. Since that date, however, ten other Centres have been established, each in charge of an assistant school medical inspector, the staff of such inspectors having been increased to thirteen.

Through the co-operation of the Education Committee, a whole-time medical officer of health has been appointed for the Cheadle Rural District to act as assistant school medical inspector. This appointment was made possible by a contribution of £180 towards the salary of the officer from the Education Committee, and £75 from the County Council in return for the work he does under the Maternity and Child Welfare Scheme.

During the year, under the Milk (Mothers and Children) Order, a scheme for supplying expectant and nursing mothers and infants with milk in necessitous cases was started, and it has been extensively taken advantage of. The question of determining whether the case is a necessitous one or not, is, by order of the Council, referred to the medical officer of the district or the medical officer of the welfare centre.

During the year the Committee purchased an Infant Welfare Travelling Exhibition which was exhibited at the following places:—Heath Town, Sedgley, and Willenhall, within the period covered by this report, and, subsequently, various other towns in North and Mid Staffordshire were visited. In all cases the exhibition was well attended and the unquestionable good which has resulted has amply repaid the expenditure involved.

Under the Childrens Act, 1908, the health visitors within the County health visiting area have, at the request of the various Boards of Guardians in the area, been appointed visitors, under Part I of the Act, to boarded-out children. Also under the War Pensions (Administrative Provisions) Act, 1918, the services of health visitors have been placed at the disposal of the local War Pensions Committee for the purpose of carrying out section 9 of the Act, which relates to the supervision of children of sailors, soldiers, and airmen.

As a complement to the health visiting scheme but applicable to the Administrative County as a whole, the scheme for supplementing the midwifery service of the County has been considerably extended, partly through the agency of the County Nursing Association, or by subsidising or training additional midwives.

In this connection I may mention that twenty-one women have been sent for training as midwives; five subsidies have been granted to practising midwives in areas where the work was inadequate to enable them to maintain themselves; while six new local nursing associations have been formed through the County Nursing Association.

Of the existing associations employing nurse midwives fifteen have received subsidies from the County Council during the year.

As regards the recovery of fees for medical attendance under the Midwives Act, 1918, I referred in my last report to the difficulty which was experienced in recovering such fees or any portion of them. Since then a collector has been appointed, and for his guidance the following scale has been fixed governing the recovery or remission of the fees:—

- (i) Where the net weekly income of the family after deducting 5s. for each child under 14 years of age does not exceed 40s., the County Council shall not claim repayment of the medical practitioner's fee.
- (ii) Where the net weekly income of the family calculated as above is over 40s. but does not exceed 60s., the County Council shall claim repayment of one-half of such fee.
- (iii) Where the net weekly income of the family calculated as above exceeds 60s., the repayment of the whole of such fee shall be claimed.
- (iv) In ascertaining the weekly income of the family the average earnings of the four weeks preceding the birth shall be taken.

The routine work under the Rivers Pollution Prevention Acts has proceeded on former lines, the work of inspecting sewage disposal works having gone on systematically. The County Rivers Inspector pays surprise visits to the various sewage disposal works, and it is satisfactory to be able to record that his visits continue to be appreciated rather than resented.

It was of course impossible during the war to be very critical with regard to the management of the various sewage disposal works, and I regret to say that some have deteriorated and have not been restored to efficient working. For some time to come, for financial reasons, we shall have to be satisfied with a lower standard than hitherto in the case of existing works, and it will not be possible to push Authorities into material expenditure in the way of supplementing existing plants or providing new ones.

During the year under review, among other matters, special reports have been presented with reference to the sanitary circumstances of Tipton Urban District, the water supply of Packmoor, and the sewerage of Burntwood Village, but, apart from these, no reports have been presented upon the systematic work carried on by the sanitary staff, one's attention having been confined merely to reporting circumstances as they arose in order that they might be dealt with by

the Committee from time to time. In addition to this a considerable amount of time was spent by the staff in acquiring detailed information regarding the sanitary conditions of various areas which were involved, or were likely to be involved, in the question of the extensions of County Boroughs and other urban areas.

As regards the provision of a County Laboratory, which received the attention of the Committee upon a report I presented, it was finally determined to postpone the matter for the present in view of the Preliminary Report of the Advisory Committee of the Ministry of Health as to local government and the possible outcome of that report.

As regards the treatment of Venereal Diseases, in addition to the two successful centres established at the North Staffordshire Infirmary and at the Wolverhampton General Hospital, two subsidiary centres were established early in the year at Tamworth and Lichfield respectively. The latter centre has proved a great success, but as regards the former the attendances have been extremely small and in all probability the Committee may deem it necessary to discontinue that centre with the approval of the Ministry. During the year the establishment of Venereal Diseases clinics at Leek and also a joint clinic at Walsall were under consideration, but no definite decision had been arrived at regarding either of these clinics at the end of the period covered by this report. Also, negotiations were entered into for the establishment of clinics at Stafford in connection with the General Infirmary, and at Stourbridge in connection with the Corbett Hospital. Satisfactory progress was made in both these cases, and in my next report I hope to be in a position to record that both clinics have actually started work.

The medical practitioners throughout the County have greatly helped in the working of the scheme by their co-operation. This may be shown by the fact that although the County Laboratory has only been opened since the 11th November nearly 70 blood specimens have been received from private practitioners up to the end of December. Again, in Lichfield four of the local practitioners attend the clinics and form a rota to assist the Clinical Officer.

There is a list of nearly twenty practitioners who have been approved by the Ministry of Health as being qualified to administer Salvarsan substitutes and who are receiving a free supply. It will thus be seen that a genuine interest in the scheme has been created amongst the profession.

The following figures will give some idea as to the extent to which the population will avail themselves of treatment when it is provided :—

STAFFORDSHIRE CASES TREATED FOR VENEREAL DISEASES
DURING YEAR 1919.

Clinic.	Syphilis.	Soft Chancres.	Gonorr- hoea.	Non- Venereal.	Total.	Attend- ances.
Wolverhampton ..	141	1	101	44	287	2076
Dudley	52	—	24	22	98	796
Birmingham Wom- en's Hospital	1	—	—	—	—	1
Birmingham General Hospital	14	—	5	15	34	241
Walsall	43	—	30	18	91	857
Lichfield	20	—	4	8	32	166
Tamworth	16	—	3	1	20	85
Stoke	137	3	72	30	242	1771

With reference to the laboratory work connected with venereal diseases, arrangements were made with the Wolverhampton General Hospital for providing a laboratory in connection with the clinic to be conducted by the County Council in place of by the Governors of the Hospital as previously arranged. The officer appointed by the County Council to do the work was Captain Wright, the late Clinical officer, who united the two offices, but who afterwards resigned, when temporary arrangements were made for the work to be carried on by Dr. Mitchell, the Hospital Venereal Diseases Clinical Officer.

In my last report I referred to the opening of the Home for the treatment of venereal diseases among women at Cleveland House, Wolverhampton, under the Church Diocesan Mission. This Home has proved to be most useful. It has provided for a class of case for which it would have been difficult to make provision otherwise.

As regards propaganda work, the County Executive Committee, under the National Council for Combating Venereal Diseases, have, with the assistance of a contribution of £200 from the County Council, been able to organise a series of lectures in different parts of the County, and local sub-committees have been established, in co-operation with the County Executive Committee, in most of the areas where there are large artisan populations.

The arrangement made by the Council for gratuitous bacteriological examinations at the Birmingham University in suspected cases of diphtheria, enteric fever, and tuberculosis, as well as other infectious diseases such as cerebro-spinal fever and malaria, continues to be appreciated and taken advantage of as will be seen from the following figures:—

With reference to the administration of the Midwives Acts, 1902 and 1918, the Council have already been informed as to the progress of the work in the three divisions of the County, but the following statement, which I have compiled from official returns and from information supplied by the Inspectors, will indicate the present position of the County as regards the number of midwives on the Register, and the number who have notified their intention to practise, as well as other details.

The number of certificated midwives on the Roll is 774, of whom 284 have notified their intention to practise, 179 being trained midwives. In addition to these, 63 midwives residing in County Boroughs and adjoining counties have also notified their intention to practise within the Administrative County.

The ages of midwives who were practising in the Administrative County on 30th June in the six years 1915—1920 are indicated in groups in the following table:—

YEAR.	25 to 45			45 to 65			65 and upwards			Totals.		
	North	Central	South	North	Central	South	North	Central	South	North	Central	South
1915 ..	48	..	53	77	..	79	32	..	32	157	..	164
1916 ..	37	..	66	74	..	66	33	..	39	144	..	171
1917 ..	37	..	59	75	..	59	34	..	33	146	..	151
1918 ..	38	..	58	72	..	52	35	..	38	145	..	148
1919 ..	30	31	40	46	43	24	26	27	21	102	101	85
1920 ..	35	52	50	41	29	20	18	23	16	94	104	86

As regards the number of cases attended by midwives during 1919 in the three areas respectively, the figures are as follows:—

	No. of Midwives.	Births attended.	Total Births.	Percentage attended by Midwives.	Mean number of cases attended per Midwife.
North ..	94	2575	3999	64.4	27.4
Central ..	104	2427	3943	61.5	23.3
South ..	86	5614	7159	78.4	65.2

The total number of cases attended by midwives only in the Administrative County during 1919 was 10,616, the total number of Births registered being 15,101. It thus appears that midwives attended 70 per cent. of the total births in the County, the percentage for the previous year being 66.

During the period covered by this summary (July 1st, 1919, to June 30th, 1920), in compliance with the rules of the Central Midwives' Board 2,087 notifications have been received from certified midwives.

The following figures show the number and nature of the notifications received during the past 15 years:—

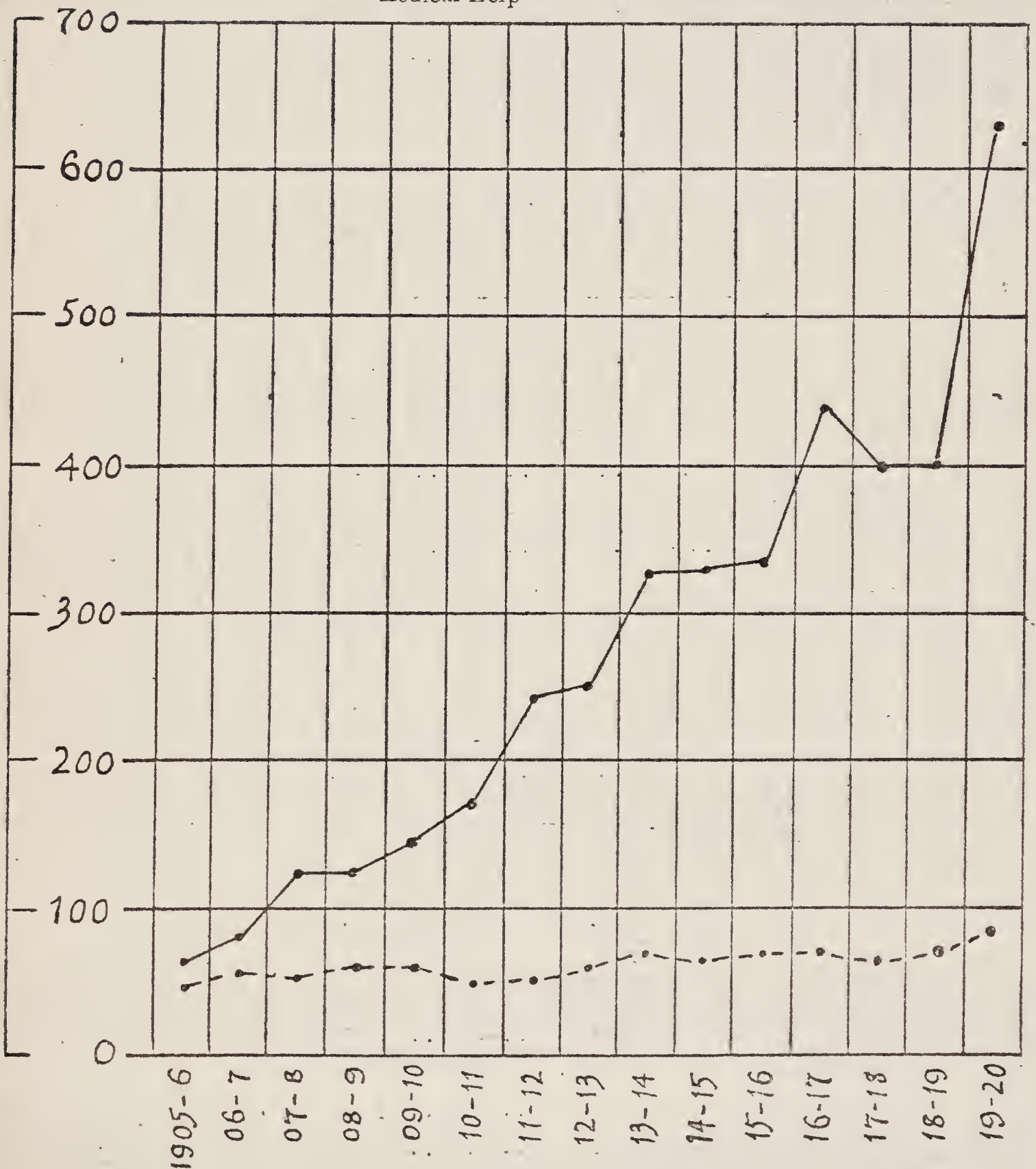
	Mean for 5 years		1915-16	1916-17	1917-18	1918-19	1919-20
	1905-6 to 1909-10	1910-11 to 1914-15					
Sending for medical help	547	979	1209	1291	1202	1165	1809
Still Births ..	285	217	234	213	192	207	239
Death of Mother.	3·4	2·8	4	2	2	6	—
Death of Child ..	37	35	35	34	27	41	39

These figures are all the more satisfactory in view of the fact that in 1907 Smethwick was constituted a County Borough, thus removing 40 certified midwives from the number under the control of the Local Supervising Authority of the County, and also because of the transference of 73 midwives to the Local Supervising Authority of the County Borough of Stoke-on-Trent, constituted in 1910, and the inclusion of Handsworth in the County Borough of Birmingham in November, 1911.

The significance of these figures becomes more apparent when represented in diagramatic form showing the relative proportion of medical help and still birth forms per 100 midwives in each year:—

NOTIFICATIONS PER 100 MIDWIVES.

Still Births
 Medical Help



It will thus be seen that while the notifications of still births were pretty constant, varying between the limits of 43 and 84 per 100 midwives, the corresponding figures of sending for medical help steadily progressed from 63 in 1905-6 to 400, 404, and 637 in the last three years respectively.

To some extent the increase during the past seven years

in the medical help cases may be accounted for by the Treasury maternity grant.

In all probability the extraordinary increase during the year under review is largely explained by the fact that the County Council have been made responsible for the payment of fees in the case of medical assistance being sent for by the midwife in emergency cases.

The following figures show the causes which occasioned the sending for medical help:—

Causes of sending for medical aid.	Northern District.	Central District.	South'm District.	Total.
PREGNANCY :				
Abortion	32	13	19	64
Threatened abortion.. ..	11	6	3	20
Puffiness of face and hands.. ..	2	1	1	4
Premature birth	8	19	4	31
Varicose veins	2	1	1	4
Fits	—	—	3	3
Vaginal discharge	—	—	1	1
Unsatisfactory condition	5	2	8	15
Excessive sickness	1	—	3	4
Loss of blood	3	1	8	12
History of previous still-births and abortions	—	1	3	4
Sore of genitals	2	—	5	7
Odema of legs.. .. .	—	1	—	1
	66	45	59	170
LABOUR :				
Abnormal presentation	43	33	49	125
Unable to recognise ditto	—	—	2	2
Delayed or difficult	120	86	175	381
Placenta prævia	10	3	4	17
Hæmorrhage ante	15	6	14	35
Ditto post	8	21	20	49
Eclampsia	3	1	2	6
Prolapse of cord	5	—	8	13
Carried forward ..	204	150	274	628

Causes of sending for medical aid.	Northern District.	Central District.	South'rn District.	Total.
Brought forward ..	204	150	274	628
Lacerated perinæum.. ..	68	72	151	291
Retained placenta and membranes	19	25	26	70
Unsatisfactory condition	3	15	4	22
Cough	4	—	1	5
Inertia	12	34	9	55
Contracted pelvis	2	2	11	15
Purulent discharge	—	2	4	6
	312	300	480	1092
LYING-IN :				
High temperature	23	18	38	79
Inflamed and painful leg	4	8	2	14
Convulsions	—	3	3	6
Unsatisfactory condition	10	9	29	48
Offensive lochia	2	—	4	6
Unusual swelling of breasts.. ..	1	1	3	5
Abdominal swelling and tenderness	2	—	3	5
	42	39	82	163
CHILD :				
Deformities	11	3	6	20
Convulsions	8	3	6	17
Inflamed and discharging eyes ..	36	33	20	89
Feebleness and prematurity.. ..	46	43	101	190
Unsatisfactory condition	13	13	4	30
Rash	2	2	2	6
Pemphigus	—	—	2	2
Spina Bifida	2	—	6	8
Hare lip and cleft palate	5	1	6	12
Club foot	1	—	3	4
Spinal paralysis	—	—	1	1
Whooping cough	—	—	4	4
Paralysis of throat	—	1	—	1
	124	99	161	384
Grand Total	544	483	782	1809

Unless reliable information is otherwise forthcoming, it is the routine practice to specially inquire into the circumstances attending all still-births reported by midwives, also, in special circumstances; inquiries are made into cases where medical help is sent for as well as when deaths of mothers or infants are reported, and it is the invariable practice when cases of puerperal fever attended by a midwife only in the first instance are reported to specially inquire into the circumstances. In the following table figures are given showing the number of ordinary visits paid by the Midwife Inspectors as well as special visits, the outcome of notifications received :—

VISITS OF INSPECTORS, NOTIFICATIONS, INQUIRIES, &C., DURING THE TWELVE MONTHS,
JULY 1ST, 1919, TO JUNE 30TH, 1920.

District.	No. of Midwives on List.	Trained.	Untrained.	Visits.	Interviews.	Notifications.								Inquiries.									
						Medical Assistance.	Inflamma- tion of Eyes.	Still Births.	Deaths. Mother.	Child.	Puerperal Fever.	Laying out the dead.	Contact with infection.	Artificial Feeding.	Medical Assistance.	Inflamma- tion of Eyes.	Still Births.	Deaths. Mother.	Child.	Puerperal Fever.	Laying out the dead.	Contact with infection.	Artificial Feeding.
North...	94	56	38	442	383	544	36	81	..	7	13	2	11	42	41	56	49	..	3	11	2	15	12
Central	104	68	36	440	393	483	33	53	..	15	7	15	18	59	14	33	22	..	8	5	8	17	14
South...	86	55	31	418	404	782	22	105	..	17	14	1	3	10	50	37	63	..	16	7	...	4	6
Totals...	284	179	105	1300	1180	1809	91	239	..	39	34	18	32	111	105	126	134	..	27	23	10	36	32

As regards ophthalmia cases, the following figures indicate the degree of severity of the cases reported during the past three years, all of which were enquired into by the midwife inspectors :—

	Enquiries.			Slight cases.			Severe cases.		
	1917-18	1918-19	1919-20	1917-18	1918-19	1919-20	1917-18	1918-19	1919-20
Southern district	42	22	22	25	11	12	17	11	10
Northern district	27	20	34	14	10	24	13	10	10
Central district ..	..	14	29	..	9	24	..	5	5
Totals ..	69	56	85	39	30	60	30	26	25

Apart from the initial enquiries, special visits are paid in order to ascertain the conditions as regards the sight of each infant on the termination of the treatment.

As regards the slight cases this year, complete recovery took place in every case. Of the 25 severe cases 18 recovered without damage to sight, five died from other causes, while the remaining two cases suffered only slight damage to sight. With reference to the total cases, irrespective of severity, a clear history of venereal disease was established in 38 cases.

As regards the serious cases among the survivors during the past three years, 72 in number, only two suffered permanent damage, one having lost the sight of one eye and the other of both eyes.

In addition to the routine enquiries 33 reported irregularities were specially investigated. Of these, 12 were dealt with by letters of caution from the County Medical Officer of Health; two were censured by the Local Supervising Authority; two were reported to the Central Midwives' Board; six voluntarily surrendered their certificates; and in 11 cases circumstances did not warrant any action being taken. As regards the two midwives reported to the Central Midwives' Board, in one case the midwife's name was removed from the roll and her certificate cancelled. In the other case the Board deferred judgment pending further reports, at the end of three and six months, as to the conduct and method of practice of the midwife, and as a result of the consideration of these reports the Board resolved to take no further action.

Since the Act came into operation, the names of 98 midwives have been removed from the Roll as the result of action taken by the Local Supervising Authority.

It would appear that the policy of the Local Supervising Authority in prosecuting women who, though uncertificated, have practised as midwives, has had the desired effect, for, during the year under review, no such proceedings had to be taken.

During the year eight midwives have died.

In the following table particulars as regards equipment, etc., of certificated midwives are set forth :—

PARTICULARS AS TO EQUIPMENT AND EFFICIENCY OF MIDWIVES
VISITED.

District	Requirements.			No. reasonably clean as to		No. who can—			General Efficiency.
	Bags Equipped		Case Books and Forms.			Read Ther- mometer.	Read and write.	Pass Catheter.	
	Fully.	Partially.		Person.	Home.				
North ...	92	2	93	89	90	88	87	57	85
Central.	98	6	101	103	104	103	97	77	99
South ...	62	24	86	86	86	84	77	55	72
Totals ...	252	32	280	272	280	275	261	189	256

As regards the Sale of Food and Drugs Acts, the administration of the Acts in this County by the Public Health Committee of the County Council is highly efficient.

The County is divided into two areas under the charge of two Senior Inspectors, who have under them assistants, and who also have the power of appointing further temporary assistants as occasion requires. The work under the Weights and Measures Act is also under the same administration and staff.

As regards the number of samples collected, this County compares favourably, I think, with other counties. In the following table I have set forth the samples which were analysed during the year 1919, together with the results:—

	No. of Samples Sub- mitted.	No. Genuine.	No. Adulter- ated.	Cautions	Prosecu- tions.	Convic- tions.
Arrowroot.. ..	12	12	..	..	..	..
Butter	67	28	39	5	34	34
Cheese	1	1	..	..	..	..
Cocoa	3	3	..	..	..	..
Coffee	39	39	..	..	..	..
Corn Flour	1	1	..	..	..	..
Dripping	3	3	..	..	..	..
Flour	14	14	..	..	..	..
Flour (Self-raising)	35	35	..	..	..	..
Ginger (Lump) ..	2	2	..	..	..	..
Ginger (Ground) ..	17	17	..	..	..	..
Glycerine	5	5	..	..	..	..
Lard	104	104	..	..	..	..
Margarine	19	19	..	3*	2*	2
Milk	1563	1462	101	50	50	45
Mustard	8	8	..	..	..	..
Oatmeal	26	26	..	..	..	..
Pearl Barley	5	5	..	..	..	..
Pepper	59	59	..	..	..	..
Rice	13	13	..	..	..	..
Rice (Ground) ..	10	10	..	..	..	..
Sago	3	1	2	..	..	..
Sugar	2	2	..	..	..	..
Tapioca	9	9	..	..	..	..
Tea	1	1	..	..	..	..
Vinegar	8	4	4	3	1	1
Totals	2029	1883	146	61	87	82

* Exposed for sale unlabelled.

Summary of Statistics.

AREA AND POPULATION.

No alterations have to be recorded either in the area of the Administrative County or of the constituent districts during the year.

The populations of the various districts used in calculating the birth and death-rates have again been supplied to me by the Registrar General, who points out that the death-rate population excludes all non-civilian males whether serving at home or abroad. This is necessary for the purpose of local death-rates because it has proved impossible to transfer the deaths of non-civilians to their areas of residence or to deal in any other satisfactory manner with the local mortality of this element in the population.

These estimates are based mainly upon the rationing returns supplied by the Ministry of Food.

The birth-rate population is intended to include all the elements contributing to the birth-rate. It consists, therefore, of the death-rate or civilian population plus all non-civilians enlisted from this country whether serving at home or abroad. This non-civilian element has been distributed over all the districts in the country in proportion to their estimated civilian population.

In the following table, the census population of the Administrative County for 1911, the civil population estimated to the middle of 1919, and the estimated population for the purpose of arriving at the birth-rate are set forth:—

	Census, 1911.	Estimated Population for Birth-rate middle of 1919.	Estimated Population for Death-rate middle of 1919.
Urban	464,647	492,299	472,591
Rural	205,721	210,507	202,080
Total.....	670,368	702,806	674,671

BIRTHS.

The births registered in the Administrative County numbered 15,101, the number in the urban districts being 10,962, and in the rural districts, 4,139.

The mean birth-rates in the whole Administrative County and in the urban and rural districts respectively for six quinquennial periods and for the past year are shown in the following table, in which corresponding rates in England and Wales are included :—

DISTRICTS.		BIRTH-RATE PER 1000 OF POPULATION.						1919
		5 Years 1889-1893.	5 Years 1894-1898.	5 Years 1899-1903.	5 Years 1904-1908.	5 Years 1909-1913.	5 years 1914-1918	
Staffordshire	Combined Urban & Rural..	33·6	33·2	32·5	30·3	27·8	24·0	21·5
	Urban.....	35·5	34·7	33·6	31·5	29·2	25·0	22·2
	Rural	30·2	30·5	30·2	27·0	24·4	21·6	19·6
England and Wales		30·8	29·7	28·7	26·9	24·5	20·4	18·5
Large Towns in England.		31·5	30·7	29·7	27·8	25·2	*20·9	19·0

* 4 years.

DEATHS.

The number of deaths among the civil population of the Administrative County amounted to 9,455, the number in the urban districts being 6,769, and in the rural districts 2,686.

In the following table comparative rates for six quinquennial periods and for the past year are given, together with corresponding figures for the country as a whole, and for large and small towns throughout England :—

		DEATH-RATE PER 1000 OF POPULATION.						
		5 Years 1889-1893.	5 Years 1894-1898.	5 Years 1899-1903.	5 Years 1904-1908.	5 Years 1909-1913.	5 Years 1914-1918	191
Staffordshire	Combined Urban & Rural.	18.1	16.9	16.1	14.6	14.1	15.0	14.0
	Urban.....	18.9	17.5	16.6	15.1	14.7	15.5	14.3
	Rural	16.8	15.7	15.1	13.4	12.7	13.8	13.3
England and Wales		19.1	17.4	16.9	15.3	13.9	15.2	13.8
Large Towns.....		21.0	19.0	18.2	15.8	14.3	15.5	13.8
Smaller Towns.		17.6	15.9	15.7	14.9	13.6	14.1	12.6

It will be noted that the death-rate continues to be satisfactorily low, notwithstanding the recurrence of the influenza epidemic during the first quarter of the year which was characterised by an excess of deaths from pneumonia. In addition, the number of deaths from accident this year was unusually large, owing to the pit disaster at Audley which resulted in 155 deaths. On the other hand, there has been a noticeable reduction in the deaths from zymotic diseases, which, assuming that the deaths from pneumonia, influenza, and accident had been an average number, would have reduced the death-rate, as a whole, to 12.9, compared with 13.5 in 1918 assuming that similar normal conditions had obtained in that year also.

INFANTILE MORTALITY.

It is satisfactory to be able to record that the steady decline in infant mortality in the Administrative County during recent years has been maintained, the urban mortality this year being 96, compared with 103 the previous year, and the rural 72, compared with 83 the previous year. Having regard to this steady decline in recent years, one is justified in concluding that it is largely attributable to recent special efforts in the direction of the conserving of infant life.

SPECIAL ZYMOTIC DEATH-RATES.

Small Pox.—It is satisfactory to be able to state that no deaths have occurred from this disease during the year, making the fifteenth year in succession without a death.

Measles.—In the Administrative County, 72 deaths occurred from measles, as compared with 186 in 1918, equal to a rate per 1,000 of the population of 0·17, as against 0·29. Of these deaths, 60 occurred in the urban districts, or 0·12 per 1,000, and 12 in the rural districts, producing a rate of 0·06 per thousand.

In the following table mean figures are given for six quinquennial periods, and figures for the past year :—

MEASLES.		5 years. 1889-1893.	5 years. 1894-1898.	5 years. 1899-1903.	5 years. 1904-1908.	5 years. 1909-1913.	5 years 1914-1918.	1919
Urban	No. of Deaths	195	239	188	211	268	188	60
	Rate per 1000	0·50	0·58	0·42	0·41	0·54	0·41	0·12
Rural	No. of Deaths	66	69	40	39	30	37	12
	Rate per 1000	0·29	0·30	0·17	0·19	0·14	0·18	0·06

Scarlet Fever.—In the Administrative County, 6 deaths occurred from scarlet fever, as compared with 12 in 1918, equal to a rate per 1,000 of the population of 0·01 respectively. Of these deaths, 5 occurred in the urban districts, or 0·01 per 1,000, and 1 in the rural districts, producing a rate of 0·00 per 1,000. In the following table mean figures are given for six quinquennial periods, and figures for the past year :—

SCARLET FEVER.		5 years. 1889-1893.	5 years. 1894-1898.	5 years. 1899-1903.	5 years. 1904-1908.	5 years 1909-1913.	5 years 1914-1918	1919
Urban	No. of Deaths	76	95	87	56	43	31	5
	Rate per 1000	0·19	0·23	0·19	0·11	0·08	0·06	0·01
Rural	No. of Deaths	39	37	36	16	11	8	1
	Rate per 1000	0·17	0·16	0·15	0·08	0·05	0·03	0·00

Diphtheria and Membranous Croup.—

In the Administrative County, 77 deaths occurred from diphtheria and membranous croup, as compared with 98 in 1918, equal to a rate per 1,000 of the population of 0·11, as against 0·15. Of these deaths, 52 occurred in the urban districts, or 0·11 per 1,000, and 25 in the rural districts, producing a rate of 0·12 per 1,000. In the following table mean figures are given for six quinquennial periods, and figures for the past year:—

DIPHTHERIA.		5 years. 1889-1893.	5 years. 1894-1898.	5 years. 1899-1903.	5 years. 1904-1908.	5 years. 1909-1913.	5 years 1914-1918	1919
Urban	No. of Deaths	16	79	91	84	56	85	52
	Rate per 1000	0·04	0·19	0·20	0·16	0·11	0·18	0·11
Rural	No. of Deaths	20	52	72	28	26	34	25
	Rate per 1000	0·09	0·22	0·31	0·14	0·12	0·17	0·12

Whooping Cough.—In the Administrative County 85 deaths occurred from whooping cough, as compared with 163 in 1918, equal to a rate per 1,000 of the population of 0·12, as against 0·26. Of these deaths, 66 occurred in urban districts, or 0·14 per 1,000, and 19 in rural districts, producing a rate of 0·09 per 1,000. In the following table mean figures are given for six quinquennial periods, and figures for the past year:

WHOOPING COUGH		5 years. 1889-1893.	5 years. 1894-1898.	5 years. 1899-1903.	5 years. 1904-1908.	5 years 1909-1913.	5 years 1914-1918	1919
Urban	No. of deaths.	182	172	152	175	132	126	66
	Rate per 1000	0·47	0·42	0·34	0·34	0·27	0·27	0·14
Rural	No. of deaths	52	54	44	42	40	30	19
	Rate per 1000	0·22	0·24	0·19	0·20	0·19	0·15	0·09

Enteric Fever.—This disease, which must be looked upon as being entirely preventable, caused 6 deaths, compared with 12 in 1918, equal to a rate of 0·01 as compared with 0·02. Of these, 2 occurred in urban districts or 0·00 per

1,000, and 4 in rural districts producing a rate of 0·02 per 1,000. In the following table mean figures are given for six quinquennial periods, and figures for the past year :—

ENTERIC FEVER.		5 years. 1889-1893.	5 years. 1894-1898.	5 years. 1899-1903.	5 years. 1904-1908.	5 years 1909-1913.	5 years 1914-1918	1919
Urban	No. of deaths	59	84	71	49	24	12	2
	Rate per 1000	0·15	0·20	0·16	0·09	0·05	0·02	0·00
Rural	No. of deaths	29	19	22	6	9	4	4
	Rate per 1000	0·12	0·08	0·09	0·03	0·04	0·02	0·02

Diarrhœa and Enteritis.—Until lately it has been the practice to record the diarrhœa death-rate on the basis of general population, but the Registrar-General has now taken as a basis the number of deaths from this disease among infants under two years per 1,000 births registered during the year. As it is only among infants that deaths from diarrhœa are significant from a health point of view, this new method of utilizing the figures available will, as time goes on and comparative records are extended, afford a more valuable index as to the efficacy of the preventive measures in operation.

The following are the mean rates for urban and rural areas in the Administrative County on the new basis of calculation :—Urban, 9·2 ; and rural, 5·0. The rates for individual areas are set forth in the detail tables at the end of this Report.

Tuberculosis.—Since February 1st, 1913, tuberculosis (both pulmonary and other forms), which had been partially notifiable previously, became universally notifiable.

In the following table figures are given showing the number of primary notifications received from medical practitioners, medical officers of institutions, and school medical inspectors during the twelve months, sub-divided as regards sex, age periods, and locality of disease.

PUBLIC HEALTH (TUBERCULOSIS) REGULATIONS, 1912,
AND PUBLIC HEALTH (TUBERCULOSIS) REGULATIONS (No. 2), 1918.

Summary of Notifications during the period of twelve months from 29th Dec., 1918, to 3rd Jan., 1920.

Primary Notifications by Practitioners and Medical Officers of Institutions.													Primary Notifications by School Medical Inspectors.			
Age periods	0	1	5	10	15	20	25	35	45	55	65 and up- wards.	Total.	Under 5	5 to 10	10 to 15	Total.
Pulmonary Males	2	5	15	17	29	44	78	53	31	12	3	289	—	2	1	3
" Females	1	6	23	21	37	29	73	37	16	8	1	252	—	3	2	5
Non-pulm. Males	1	22	14	11	12	27	3	1	2	1	1	70	—	2	—	2
" Females	5	6	21	20	10	7	7	4	5	3	—	88	—	2	1	3

It is interesting to note that fewer notifications have been received this year than in 1918, and that the numbers have declined each year since notification became general, as will be seen by the following figures:—

1913—1,722	1915—1,233	1917—873	1919—699
1914—1,399	1916—1,048	1918—856	

No doubt the diminishing figures are explained by a surmise I made five years ago that the early figures would be higher than those of the succeeding few years, because they naturally would include a considerable number of cases of long standing.

TABLES.

Table showing Population, Number of Persons per Acre, Birth and Death-rates, as well as the Death-rates at all ages and among Children under 1 year, and the Death-rates from Zymotic Diseases, Phthisis, Diseases of the Respiratory Organs, &c.

URBAN.

District.	Population at all ages.		Number of persons per acre.	Birth-rate per 1000 of population.	General mortality per 1000 of population.	Mortality in children under one year per 1000 registered births.	Zymotic mortality.						Phthisis.	Tuberculous Meningitis and other Tuberculous Diseases.	Cancer, Malignant Disease.	Bronchitis.	Pneumonia, (all forms).	Other Diseases of Respiratory Organs.	Cirrhosis of Liver.	Alcoholism.	Nephritis and Bright's Disease.	Congenital Debility and Premature Birth.	
	Census 1911.	Estimated for					Per 1000 of population.																
							Smallpox.	Measles.	Scarlet Fever.	Whooping Cough.	Diphtheria and Croup.	Enteric Fever.											Diarrhoea and Enteritis (under 2 years).
Amblecote	3155	3196	3068	4.0	15.6	14.6	80	.	.	.	.	.	.	0.65	0.32	0.32	1.63	1.30	0.32	.	.	0.32	0.32
Audley	14776	15084	14480	1.7	23.7	23.6	86	.	.	.	.	.	.	0.34	0.27	0.89	1.45	1.17	0.14	0.14	.	0.69	0.96
Blidulph	7422	7991	7671	1.3	25.6	14.4	97	0.91	.	.	.	.	9.7	0.65	0.26	0.65	0.26	0.91	0.13	.	.	0.26	1.04
Billston	25081	27372	26276	14.0	25.7	16.7	147	.	0.45	.	.	.	22.7	1.18	0.15	1.10	1.56	2.73	0.11	0.04	.	0.38	1.63
Brierley Hill....	12263	12913	12396	12.2	20.7	13.8	86	0.08	.	.	0.08	.	11.2	1.21	0.40	0.96	1.53	1.53	0.24	.	.	0.16	0.80
Brownhills	16852	18705	17956	2.8	24.2	13.3	62	0.28	0.05	0.28	0.28	.	11.0	0.66	0.22	0.94	1.44	1.05	0.05	.	.	0.22	1.00
Cannock.....	28586	34804	33411	4.1	22.8	11.4	84	0.06	.	0.06	0.12	.	3.7	0.62	0.24	0.45	0.86	1.31	0.21	.	.	0.06	0.98
Coseley	22834	23642	22696	6.0	24.2	13.9	113	0.13	.	0.13	0.04	0.04	26.1	0.53	0.04	1.01	1.58	2.24	0.26	.	.	0.09	1.01
Darlaston	17107	17917	17200	18.8	24.7	15.1	115	0.52	.	0.52	0.11	.	18.0	0.87	0.11	0.98	1.74	2.50	0.23	0.11	.	0.06	0.93
Heath Town....	12276	11135	10689	12.0	23.1	13.2	85	.	0.09	.	.	.	3.8	0.93	0.37	0.93	0.65	2.80	0.18	.	.	0.28	1.03
Kidsgrove.....	9012	9373	8993	2.8	22.3	13.2	76	.	.	.	0.33	.	.	0.77	.	0.44	0.77	0.33	.	.	.	0.44	0.66
Leek	16663	17043	16361	11.2	14.5	14.9	100	0.06	.	0.06	0.18	0.06	12.1	1.04	0.12	1.40	0.97	0.73	0.30	0.06	.	0.36	0.55
Lichfield	8616	9578	9195	2.6	15.4	11.2	74	0.43	.	0.43	0.11	.	.	1.08	0.11	1.08	0.54	0.54	0.11	.	.	0.21	0.54
Newcastle	20201	20565	19742	29.4	23.6	17.8	95	0.05	.	0.05	0.20	.	2.0	1.16	0.25	1.62	2.37	1.62	0.20	0.05	.	0.60	0.91
Perry Barr.....	2403	2320	2227	0.5	21.1	11.2	81	.	.	.	.	.	40.8	0.90	0.44	0.44	.	0.44	.	.	.	0.44	0.44
Quarry Bank...	7393	7918	7601	11.4	22.2	12.2	68	.	.	.	0.13	.	5.7	0.65	0.26	0.65	1.18	0.65	.	.	.	0.39	0.79

Deaths occurring during the year 1919, classified according to Diseases and Localities, together with Births occurring during the year.

URBAN.

DISTRICT.	Births.	Deaths from all causes.	Deaths under 1 year.	Enteric Fever.	Smallpox.	Measles.	Scarlet Fever.	Whooping Cough.	Diphtheria and Croup.	Influenza.	Erysipelas.	Phthisis (Pulmonary Tuberculosis).	Tuberculous Meningitis.	Other Tuberculous Diseases.	Cancer, Malignant Disease.	Rheumatic Fever.	Meningitis.	Organic Heart Disease.	Bronchitis.	Pneumonia (all forms).	Other Diseases of Respiratory Organs.	Diarrhoea and Enteritis under 2 years	Appendicitis and Typhlitis.	Cirrhosis of Liver.	Alcoholism.	Nephritis and Bright's Disease.	Puerperal Fever.	Other Accidents & Diseases of Pregnancy & Parturition.	Congenital Debility and Malformation, including Premature Birth.	Violent Deaths, excluding Suicide.	Suicides.	Other Defined Diseases.	Diseases ill-defined or unknown.		
Amblecote	50	45	4	..	..	..	..	..	..	1	..	2	1	..	1	..	..	1	4	5	4	1	..	1	..	..	..	1	..	..	1	..	1	20	1
Audley	358	343	31	..	..	..	..	..	..	23	2	5	..	4	13	..	..	1	12	21	17	2	..	..	2	..	10	1	..	..	14	160	1	54	1
Biddulph	205	111	20	..	..	..	7	..	..	15	..	5	..	2	5	..	..	2	6	2	7	1	2	2	..	..	2	..	1	1	8	6	37	1	
Blilton	704	410	104	..	..	12	..	..	1	33	..	31	1	3	29	..	1	30	41	72	3	3	16	3	1	..	10	..	..	3	43	6	3	94	4
Brierley Hill....	268	171	23	..	..	..	..	1	1	9	..	15	3	2	12	1	2	17	19	19	3	3	3	2	..	..	2	..	1	1	10	3	1	43	2
Brownhills	453	235	28	..	..	..	1	5	5	22	..	12	3	1	17	3	4	18	26	19	1	7	3	1	..	..	4	..	..	18	3	2	64	1	
Cannock	794	383	67	..	..	..	..	2	4	33	..	21	4	4	15	1	1	37	29	44	7	3	3	2	..	..	2	..	4	33	21	4	105	7	
Cosley	574	316	65	1	..	4	..	3	1	24	..	12	..	1	23	1	..	13	36	51	6	15	1	..	..	..	2	..	..	23	17	3	74	5	
Darlaston	443	261	51	..	..	..	..	9	2	8	..	15	1	1	17	..	3	20	30	43	4	8	..	2	..	2	..	1	2	16	10	3	65	1	
Heath Town....	258	141	22	..	..	1	..	..	..	18	..	10	2	2	10	..	..	11	7	30	7	2	1	..	..	3	..	..	..	11	5	..	28	..	
Kidsgrove.....	209	119	16	..	..	..	..	..	3	30	1	7	..	..	4	..	..	10	7	3	..	5	1	..	..	4	2	1	6	9	3	2	35	..	
Leek	247	244	27	1	..	..	..	1	3	28	..	17	2	..	23	1	2	30	16	12	5	3	..	..	1	..	6	1	..	9	3	2	70	2	
Lichfield	148	103	11	..	..	..	..	4	1	9	..	10	..	1	10	..	..	10	5	6	1	..	..	..	..	2	..	..	1	5	5	1	33	..	
Newcastle	485	352	46	..	..	..	..	1	4	37	1	23	3	2	32	..	2	36	47	32	4	4	1	4	1	..	12	2	3	18	11	1	74	1	
Perry Barr.....	49	25	4	..	..	..	..	..	..	5	..	2	..	1	1	..	..	2	..	1	..	..	2	..	..	..	1	..	..	1	1	..	8	..	
Quarry Bank...	176	93	12	..	..	..	..	..	1	21	..	5	..	2	5	..	..	7	9	5	..	..	1	..	..	3	..	3	..	6	3	3	22	..	

DISTRICT.	Births.	Deaths from all causes.	Deaths under 1 year.	Enteric Fever.	Smallpox.	Measles.	Scarlet Fever.	Whooping Cough.	Diphtheria and Croup.	Influenza.	Erysipelas.	Phthisis (Pulmonary Tuberculosis).	Tuberculous Meningitis.	Other Tuberculous Diseases.	Cancer, Malignant Disease.	Rheumatic Fever.	Meningitis.	Organic Heart Disease.	Bronchitis.	Pneumonia (all forms).	Other Diseases of Respiratory Organs.	Diarrhoea and Enteritis under 2 years.	Appendicitis and Typhlitis.	Cirrhosis of Liver.	Alcoholism.	Nephritis and Bright's Disease.	Puerperal Fever.	Other Accidents & Diseases of Pregnancy & Parturition.	Congenital Debility and Malformation, including Premature Birth.	Violent Deaths, excluding Suicide.	Suicides.	Other Defined Diseases.	Diseases ill-defined or unknown
Rowley Regis...	862	520	77	..	..	12	..	4	2	91	..	27	6	7	30	3	30	49	47	4	4	5	..	2	..	12	2	3	31	12	4	134	..
Rugeley	103	72	12	..	..	4	..	..	..	4	..	2	..	1	4	..	4	11	2	1	1	1	1	1	1	1	1	..	7	4	1	22	..
Sedgley	358	207	31	..	..	..	..	4	3	17	..	16	1	1	7	..	13	17	22	5	5	..	1	..	..	3	1	..	14	7	2	71	1
Short Heath....	110	70	13	..	..	..	..	6	..	9	..	3	1	1	1	..	2	8	9	1	1	..	..	..	..	3	..	..	3	2	1	20	..
Smallthorne ...	355	193	42	..	..	..	1	2	3	13	..	11	1	4	13	..	21	28	11	3	3	3	3	..	..	3	1	2	20	5	1	44	1
Stafford	498	350	40	..	..	..	..	1	12	39	..	25	2	5	20	1	33	32	28	5	5	..	..	..	2	1	1	13	9	2	117	..	
Stone.....	100	74	7	..	..	..	..	..	..	3	..	7	..	..	10	..	9	5	5	1	..	1	1	..	..	..	..	4	1	..	26	1	
Tamworth	184	110	14	..	..	4	..	..	1	10	..	7	..	2	10	1	10	11	9	..	..	..	..	..	1	..	..	5	3	1	35	..	
Tettenhall	76	69	6	..	..	..	..	..	..	10	..	2	..	..	7	..	12	4	2	2	2	1	..	..	..	..	..	6	..	..	22	..	
Tipton.....	873	493	100	..	..	7	1	5	1	44	..	29	3	4	32	1	24	20	66	7	16	16	..	1	1	5	3	3	47	24	3	128	4
Uttoxeter	96	66	9	..	..	1	..	..	..	3	..	8	1	1	7	..	4	4	3	1	1	1	1	..	..	3	1	..	4	1	1	21	..
Wednesbury....	724	427	73	..	..	5	..	3	1	22	2	23	2	7	30	1	26	54	52	4	4	7	2	..	2	16	1	3	30	10	6	115	2
Wednesfield ...	137	112	16	..	..	3	..	..	..	16	..	6	2	2	3	..	7	5	26	2	2	..	1	..	..	1	..	1	5	3	..	27	1
Willenhall.....	429	257	36	..	..	7	..	..	1	18	..	17	..	5	19	2	18	22	35	2	2	2	1	..	..	3	..	2	16	7	4	67	7
Wolstanton	636	367	51	..	..	..	2	8	2	30	1	19	..	2	28	1	35	68	23	1	4	4	3	..	..	4	1	3	20	10	4	91	1
Totals.....	10962	6769	1058	2	..	60	5	66	52	645	7	394	39	68	438	17	511	647	704	79	101	28	11	3	123	19	32	447	355	57	1772	44	

District.	Population at all ages.			Mean area per person in acres.	Birth-rate per 1000 of population.	General mortality per 1000 of population.	Mortality in children under one year per 1000 registered births.	Zymotic mortality.						Phtisis.	Tuberculous Meningitis and other Tuberculous Diseases.	Cancer, Malignant Disease.	Bronchitis.	Pneumonia (all forms).	Other Diseases of Respiratory Organs.	Cirrhosis of Liver.	Alcoholism.	Nephritis and Bright's Disease.	Congenital Debility and Malformation, including Premature Birth.
	Per 1000 of population.							Diarrhoea, &c. (under 2 yrs).															
	Census 1911.	Estimated for	Death-rate.						Birth-rate.	Measles.	Scarlet Fever.	Whooping Cough.	Diphtheria and Croup.										
Blore Heath ...	2287	2185	2098	6.5	21.5	9.9	42	..	..	..	..	..	..	0.47	1.42	1.42	1.42	..	..	0.10	..	..	..
Cannock.....	19786	20014	19213	2.7	21.1	15.8	76	..	0.05	..	..	0.21	..	0.78	1.24	1.04	1.24	..	..	0.10	..	..	..
Cheadle	26706	26662	25595	2.1	21.4	13.4	77	..	..	0.15	0.04	0.04	0.04	0.58	1.21	1.05	0.78	0.31	..	..	..	..	..
Gnosall	4765	4604	4420	6.5	16.0	16.3	121	..	0.22	..	..	..	..	0.22	0.90	1.35	0.63	0.68	..	..	..	..	..
Kingswinford....	20803	22008	21127	0.2	23.6	12.0	75	..	0.04	..	0.04	..	..	0.85	0.66	0.90	1.46	0.19	..	..	0.42	0.31	0.70
Leek	15487	15708	15079	4.6	23.7	13.4	67	..	0.06	..	0.20	0.20	..	0.66	1.32	0.99	1.26	0.13	..	..	0.26	0.59	0.45
Lichfield	28718	30244	29032	2.4	17.4	12.5	83	..	0.10	..	0.07	0.13	0.03	0.44	0.93	1.58	0.93	0.13	..	..	0.24	0.58	0.50
Mayfield.....	3915	3849	3695	6.6	18.7	15.9	69	..	..	..	..	..	..	0.54	1.62	1.08	1.35	..	..	..	0.54	0.54	0.54
Newcastle	6410	6015	5774	3.4	18.4	12.8	81	..	0.52	..	..	..	..	0.34	1.04	1.04	0.69	0.34	0.17	..	0.52	1.04	1.04
Selsdon	15074	16354	15699	2.7	16.1	11.0	53	..	..	0.06	..	..	..	0.51	0.82	0.57	0.51	0.06	..	..	0.19	0.38	0.38
Shifnal	798	883	848	6.4	13.6	7.0	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
(Staffs. por.)	8468	8806	8453	6.4	19.0	16.8	59	..	..	..	..	0.35	0.12	0.83	1.30	0.83	1.18	0.35	..	..	0.59	1.06	1.06
Stafford	4774	4970	4771	0.6	25.5	14.2	63	..	..	0.84	0.21	0.21	0.21	0.63	0.63	1.05	2.51	..	..	..	0.63	0.63	0.63
Stoke-on-Trent	14387	13949	13391	5.0	14.8	15.1	63	..	0.07	0.07	0.07	0.44	..	0.59	0.89	1.20	0.59	0.52	0.07	..	0.30	0.22	0.22
Stone.....	5113	5920	5683	3.8	16.9	12.8	90	..	..	..	..	0.35	..	0.70	1.05	1.58	1.76	0.35	..	..	0.52	0.35	0.35
Tamworth	9087	8365	8030	3.2	16.5	12.3	65	..	..	..	..	..	..	0.62	1.74	0.62	0.50	0.37	..	..	0.12	0.62	0.62
(Staffs. por.)	8152	7303	7011	6.8	16.7	11.8	16	..	0.14	0.14	..	..	..	0.42	0.57	0.57	0.28	..	..	..	0.57	0.28	0.28
Tutbury	10991	12668	12161	0.9	22.3	11.6	95	..	..	0.24	0.08	0.08	..	0.74	0.74	0.98	0.41	0.08	..	..	0.24	1.39	1.39
Walsall																							
Totals and Averages	205721	210507	202080	3.1	19.6	13.3	72	..	0.06	0.00	0.09	0.12	0.02	0.61	1.02	1.05	0.95	0.19	0.02	..	0.33	0.65	0.65

District.	Births.	Deaths from all causes.	Deaths under 1 year.	Enteric Fever.	Smallpox.	Measles.	Scarlet Fever.	Whooping Cough.	Diphtheria and Croup.	Influenza.	Erysipelas.	Phtisis (Pulmonary Tuberculosis).	Tuberculous Meningitis.	Other Tuberculous Diseases.	Cancer. Malignant Disease.	Rheumatic Fever.	Meningitis.	Organic Heart Disease.	Bronchitis.	Pneumonia (all forms).	Other Diseases of Respiratory Organs.	Diarrhoea and Enteritis under 2 years.	Appendicitis and Typhlitis.	Cirrhosis of Liver.	Alcoholism.	Nephritis and Bright's Disease.	Puerperal Fever.	Other accidents & Diseases of Pregnancy & Parturition.	Congenital Debility and Malformation, including Premature Birth.	Violent Deaths, excluding Suicide.	Suicides.	Other Defined Diseases.	Diseases ill-defined or unknown.		
Blore Heath ..	47	21	2	..	..	..	..	..	..	6	..	1	..	..	3	..	..	..	5	3	..	..	..	..	..	..	..	..	..	..	..	..	3	..	
Cannock.....	422	304	32	..	..	1	..	..	4	30	..	15	2	7	24	..	..	1	21	20	24	..	1	2	2	..	8	1	3	18	13	2	104	1	3
Cheadle	571	344	44	1	..	..	..	4	1	47	..	15	5	1	31	2	3	33	33	27	20	8	2	2	2	..	8	3	2	18	10	..	100	1	1
Gnosall	74	72	9	..	..	1	..	..	..	4	..	1	1	1	4	..	1	12	6	3	3	3	2	2	..	..	..	..	..	2	2	2	29	..	..
Kingswinford....	521	255	30	..	..	1	..	1	..	15	..	18	3	2	14	1	3	22	19	31	4	6	2	..	..	..	9	2	..	12	8	4	75	3	3
Leek	372	203	25	..	..	1	..	3	3	23	..	10	3	5	20	1	3	22	15	19	2	2	2	..	..	..	4	..	..	9	8	2	46	2	2
Lichfield	528	365	44	1	..	3	..	2	4	44	1	13	..	8	27	1	..	30	46	27	4	2	3	..	..	..	7	..	1	17	20	3	99	2	2
Mayfield.....	72	59	5	..	..	..	..	..	..	4	..	2	1	1	6	1	..	12	4	5	..	2	1	..	..	..	2	..	..	2	..	..	16	..	..
Newcastle	111	74	9	..	..	3	..	..	..	7	..	2	..	..	6	..	..	7	6	4	2	..	..	..	1	3	1	..	..	6	4	1	21	..	..
Selsdon	264	173	14	..	..	..	..	1	..	17	..	8	3	4	13	..	2	26	9	8	1	1	1	1	..	..	3	..	1	6	5	1	62	1	1
Shifnal	12	6	..	..	..	..	..	..	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..
(Staffs. por.)																																			
Stafford	168	142	10	1	..	..	..	..	3	12	1	7	..	2	11	..	..	15	7	10	3	..	1	..	..	..	5	..	..	9	4	1	50	..	..
Stoke-on-Trent	127	68	8	1	..	..	..	4	1	3	..	3	1	..	3	1	3	8	5	12	..	..	..	..	..	..	3	1	..	3	..	..	16	..	..
Stone.....	207	203	13	..	..	1	..	1	6	35	..	8	1	3	12	2	..	21	16	8	7	..	..	..	1	..	4	..	..	3	6	..	67	1	1
Tamworth	100	73	9	..	..	..	..	..	2	4	1	4	1	..	6	..	2	4	9	10	2	..	1	..	..	3	..	..	..	2	4	..	18	..	..
(Staffs. por.)																																			
Tutbury	138	99	9	..	..	..	..	..	..	12	..	5	..	..	14	..	2	13	5	4	3	..	..	..	..	..	1	..	..	5	1	..	33	1	1
Uttoxeter	122	83	2	..	..	1	1	..	..	5	..	3	1	1	4	1	..	12	4	2	..	..	..	..	..	..	4	..	1	2	1	1	39	..	..
Walsall	283	142	27	..	..	..	..	3	1	5	..	9	3	1	9	2	4	14	12	5	1	3	1	..	..	..	3	..	..	17	4	..	44	1	1
Totals.....	4130	2686	301	4	..	12	1	19	25	276	3	124	25	36	207	12	24	277	213	192	40	21	14	4	..	67	8	8	131	90	15	825	13	13	

Table showing the number of cases of certain Infectious Diseases notified in each sanitary area during the year 1919, and the Attack-Rates per 1000 of the population.

URBAN.

District.	Estimated Civil Population in the middle of 1919.	Small-pox.		Scarlet Fever.		Diphtheria.		Enteric Fever.		Puerperal Fever.		Erysipelas.		Continued Fever Cases.	Cerebro-spinal Fever Cases.	Polio-myelitis Cases.
		Cases.	Rate.	Cases.	Rate.	Cases.	Rate.	Cases.	Rate.	Cases.	Rate.	Cases.	Rate.			
Amblecote	3068	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Audley	14480	..	..	12	0·83	22	1·52	2	0·14	..	..	..	..	..	..	..
Blidulph	7671	..	..	5	0·65	..	..	..	..	..	..	7	0·91	..	..	..
Bliston	26276	..	..	26	0·99	12	0·46	..	..	..	..	1	0·04	..	..	..
Brierley Hill....	12396	..	..	8	0·65	11	0·89	..	..	..	..	2	0·16	..	..	..
Brownhills	17956	..	..	27	1·50	35	1·95	..	..	..	..	10	0·56	..	6	1
Cannock.....	33411	..	..	11	0·33	51	1·53	..	..	..	..	11	0·33	..	..	2
Coseley	22696	..	..	15	0·66	2	0·09	1	0·04	1	0·04	21	0·93	..	..	..
Darlaston	17200	..	..	16	0·93	3	0·17	..	..	1	0·06	4	0·23	..	..	..
Heath Town....	10689	..	..	18	1·68	1	0·09	3	0·28	1	0·09	3	0·28	..	1	..
Kidsgrove.....	8998	..	..	30	3·33	10	1·11	1	0·11	..	..	1	0·11	..	..	1
Leek	16361	..	..	41	2·51	23	1·41	..	..	..	..	7	0·43	..	..	..
Lichfield	9195	..	..	2	0·22	7	0·76	..	..	..	..	5	0·54	..	..	..
Newcastle	19742	..	..	12	0·61	20	1·01	..	..	..	..	6	0·30	..	..	..
Perry Barr.....	2227	..	..	2	0·90	..	..	..	..	..	..	..	..	..	..	..
Quarry Bank...	7601	..	..	4	0·53	9	1·18	..	..	1	0·13	..	..	..	..	..

URBAN—continued.

DISTRICT.	Estimated Civil Population in the middle of 1919.	Small-pox.		Scarlet Fever.		Diphtheria.		Enteric Fever.		Puerperal Fever.		Erysipelas.		Continued Fever Cases.	Cerebro- spinal Fever Cases.	Polio- myelitis Cases.
		Cases.	Rate.	Cases.	Rate.	Cases.	Rate.	Cases.	Rate.	Cases.	Rate.	Cases.	Rate.			
Rowley Regis...	36749	1	0.03	8	0.22	12	0.33	..	..	1	0.03	12	0.33	..	..	1
Rugeley	4744	..	..	3	0.63	2	0.42	..	..	..	..	..	..	..	..	..
Sedgley	15971	..	..	33	2.07	24	1.50	..	..	2	0.13	10	0.63	..	..	..
Short Heath....	4208	..	..	..	..	2	0.47	..	..	..	..	1	0.23	..	..	..
Smallthorne...	13611	..	..	32	2.35	20	1.47	..	..	1	0.07	6	0.44	..	1	..
Stafford	26698	..	..	30	1.12	99	3.71	1	0.04	2	0.07	13	0.49	..	..	4
Stone.....	4966	..	..	6	1.21	24	4.83	..	..	..	..	2	0.40	..	..	..
Tamworth	7520	..	..	2	0.27	5	0.66	..	..	..	..	3	0.40	..	..	..
Tettenhall	5301	..	..	6	1.13	1	0.19	..	..	..	..	1	0.19	..	..	..
Tipton	32555	..	..	18	0.55	5	0.15	..	..	1	0.03	11	0.34	..	..	..
Uttoxeter	4872	..	..	21	4.31	..	..	..	..	..	..	1	0.21	..	..	..
Wednesbury....	30329	..	..	41	1.35	19	0.63	..	..	2	0.07	25	0.82	..	..	..
Wednesfield ...	6474	..	..	7	1.08	1	0.15	..	..	..	..	1	0.15	..	..	..
Willenhall.....	19286	..	..	6	0.31	4	0.21	..	..	..	..	1	0.05	..	2	..
Wolstanton	29280	..	..	67	2.29	19	0.65	..	..	..	..	10	0.34	..	..	..

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Table showing the number of cases of certain Infectious Diseases notified in each sanitary area

RURAL.

DISTRICT.	Estimated Civil Population in the middle of 1919.	Small-pox.		Scarlet Fever.		Diphtheria.		Enteric Fever.		Puerperal Fever.		Erysipelas.		Continued Fever Cases.	Cerebro- spinal Fever Cases.	Polio- myelitis Cases.
		Cases.	Rate.	Cases.	Rate.	Cases.	Rate.	Cases.	Rate.	Cases.	Rate.	Cases.	Rate.			
Blore Heath ...	2098	..	..	3	1·43	..	..	..	..	1	0·48	..	..	..	..	..
Cannock.....	19213	..	..	2	0·10	29	1·51	..	..	2	0·10	7	0·36	..	..	..
Cheadle	25595	..	..	43	1·68	66	2·58	45	1·76	3	0·12	9	0·35	..	1	2
Gnosall	4420	..	..	11	2·49	..	..	..	..	..	..	..	..	..	..	..
Kingswinford...	21127	..	..	7	0·33	..	..	..	..	..	..	2	0·09	..	..	..
Leek	15079	..	..	23	1·53	24	1·59	..	..	..	..	3	0·20	..	1	..
Lichfield	29032	..	..	34	1·17	114	3·93	1	0·03	..	..	7	0·24	..	..	1
Mayfield.....	3695	..	..	1	0·27	..	..	..	..	1	0·27	1	0·27	..	..	..
Newcastle	5774	..	..	14	2·42	2	0·35	..	..	..	..	..	..	..	..	..
Selsdon	15699	..	..	24	1·53	9	0·57	..	..	..	..	3	0·19	..	..	..
Shifnal	848	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
(Staffs. par.)		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Stafford	8453	..	..	14	1·66	25	2·96	1	0·12	2	0·24	1	0·12	..	..	..
Stoke-on-Trent	4771	..	..	4	0·84	13	2·72	..	..	..	..	2	0·42	..	..	..
Stone.....	13391	..	..	10	0·75	37	2·76	..	..	..	..	5	0·37	..	..	..
Tamworth	5683	..	..	1	0·18	4	0·70	..	..	..	..	3	0·53	..	..	..
(Staffs. par.)		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tutbury	8030	..	..	8	1·00	8	1·00	..	..	..	..	1	0·12	..	..	..
Uttoxeter	7011	..	..	16	2·28	6	0·86	..	..	..	..	3	0·43	..	..	..
Walsall	12161	..	..	18	1·48	1	0·08	..	..	2	0·16	2	0·16	..	3	..

SUMMARY OF HOUSING NEEDS FROM DISTRICT RETURNS.

District.	Number of Working Class Houses in the District.	Number required to relieve over- crowding and replace unfit houses, &c.	Council's Scheme.
URBAN.			
Amblecote	643	25	24
Audley	2900	40	20
Biddulph	1380	200	200
Bilston	4517	1695	1695
Brierley Hill	2400	543	90
Brownhills	3243	250	250
Cannock	5610	1206	850
Coseley	4500	964	500
Darlaston	3600	536	132
Heath Town	2549	741	300
Kidsgrove	1753	500	500
Leek	3884	250	212
Lichfield	679	44	50
Newcastle	3500	744	380
Perry Barr	383	64	64
Quarry Bank	1535	623	226
Rowley Regis	6685	900	900
Rugeley	786	106	124
Sedgley	3156	1251	1250
Short Heath	820	87	90
Smallthorne	2600	150	150
Stafford	5000	440	440
Stone	939	150	128
Tamworth	1404	150	30
Tettenhall	1081	60	60
Tipton	6729	327	190
Uttoxeter	807	180	180
Wednesbury	5077	1370	241
Wednesfield	1800	150	148
Willenhall	3537	1859	1859
Wolstanton	4830	400	400
	37882	16005	11693
RURAL.			
Blore Heath	415	30	30
Cannock	4024	507	507
Cheadle	4822	304	304
Gnosall	915	80	80
Kingswinford	3542	212	212
Leek	1850	358	358
Lichfield	4431	500	300
Mayfield	581	9	9
Newcastle	1017	56	56
Seisdon	3380	453	206
Stafford	1531	72	90
Stoke	963	61	20
Stone	2640	230	210
Tamworth	4023	187	200
Tutbury	1151	65	65
Uttoxeter	950	45	45
Walsall	1111	140	140
	33828	3309	2802
Totals	71710	19314	14495
Combined U. and R.			

Particulars relating

District.	Civil Population Estimated at middle of 1919.	Infants born in 1919.					
		Births.				First Visits.	
		Registered.	Notified.				
			Alive. (1)	Premature. (2)	Stillborn. (3)	Expectant Mothers. (4)	Children. (5)
URBAN.							
AUDLEY	14480	358	340	5	10	—	334
BIDDULPH	7671	205	128	7	—	—	142
BROWNHILLS	17956	453	448	5	12	88	388
HEATH TOWN	10689	258	267	4	7	—	274
KIDSGROVE	8998	209	211	6	10	—	221
LICHFIELD	9195	148	134	2	11	27	136
PERRY BARR	2227	49	40	—	—	6	58
QUARRY BANK	7601	176	178	5	12	242	190
RUGELEY	4744	103	87	—	—	12	91
SEDGLEY	15971	358	378	6	10	50	380
SHORT HEATH	4208	110	111	6	2	16	118
SMALLTHORNE	13611	355	354	14	—	—	349
TAMWORTH	7520	184	161	2	10	33	71
UTTOXETER	4872	96	90	2	2	26	85
WEDNESFIELD	6474	137	123	4	5	35	123
WILLENHALL	19286	429	392	7	20	23	412
RURAL.							
BLORE HEATH	2098	47	22	3	1	32	22
CHEADLE	25595	571	376	5	16	174	315
GNOSALL	4420	74	34	—	1	19	43
LEEK	15079	372	341	6	7	11	330
MAYFIELD	3695	72	56	1	1	47	63
NEWCASTLE	5774	111	86	3	2	15	100
STAFFORD	8453	168	129	5	2	78	98
STOKE-ON-TRENT	4771	127	93	1	1	—	72
STONE	13391	207	171	10	3	93	148
TAMWORTH	5683	100	30	3	4	24	126
TUTBURY	8030	138	56	1	1	16	41
UTTOXETER	7011	122	59	1	—	28	73
WALSALL	12161	283	265	3	9	64	304
PARISHES.							
BLYMHILL AND WESTON	848	12	11	—	—	—	10
DUDLEY CASTLE HILL ..	12	—	—	—	—	—	—
	292584	6032	5171	117	159	1159	5117

Maternity and Infan

to the work during the

Revisits.		Total Visits.		Children on Visiting List at end of 1919.	
Expectant Mothers. (6)	Children. (7)	Expectant Mothers. (8)	Children. (9)	Under One Year. (10)	One Year under five (11)
1	808	1	1142	316	608
—	483	—	625	121	24
42	2944	130	3332	445	891
—	3249	—	—	228	369
4	143	4	364	188	341
44	1386	71	1492	172	125
2	161	8	219	55	34
—	1531	242	1721	162	299
—	997	12	1088	84	134
40	2769	90	3149	601	338
15	724	31	842	106	196
—	1535	—	1884	318	468
66	468	99	1211	71	139
52	110	78	624	89	117
12	1213	47	1336	105	214
25	2120	48	2552	746	859
52	232	83	254	22	40
227	1991	135	2306	300	614
23	117	42	488	58	89
3	1392	14	1722	293	485
98	293	165	356	55	88
23	864	38	964	84	142
187	913	254	222	72	136
—	122	—	194	72	130
64	761	145	1399	193	239
58	355	75	832	36	90
—	162	16	345	49	63
80	735	131	915	54	116
67	1972	131	2276	236	392
—	26	—	36	11	5
—	—	—	—	—	—
1185	30576	2090	34890	5342	7785

† Districts or parts of districts worked by emergency

nt Welfare.

year ending 31st December, 1919.

ist	Deaths and Removals of Children on Visiting List during 1919.						Welfare Centre.			
	Under ten days.		Over ten days and under one year.		One year and under five.		No. on books.		Total No. of Attendances.	
and e.	Deaths (12)	Re-movals (13)	Deaths (14)	Re-movals (15)	Deaths (16)	Re-movals (17)	Expectant Mothers. (18)	Children. (19)	Expectant Mothers. (20)	Children. (21)
	7	2	12	6	3	14	—	—	—	—
	—	—	4	3	—	—	—	—	—	—
	3	—	16	7	19	9	—	—	—	—
	5	1	13	—	6	—	—	—	—	—
	5	1	11	3	8	8	6	116	6	499
	2	—	3	14	3	43	—	—	—	—
	—	—	2	1	—	2	—	—	—	—
	5	—	3	8	6	14	39	—	—	—
	4	—	8	1	2	6	—	—	—	—
	11	—	20	10	20	20	13	162	50	639
	5	—	3	2	1	2	—	—	—	—
	11	1	30	13	10	9	—	—	—	—
	2	—	10	4	8	2	2	60	44	1020
	5	3	2	—	2	2	20	19	150	230
	1	—	10	7	7	2	—	—	—	—
	8	—	9	10	19	35	8	138	27	761
	—	—	—	—	—	—	—	—	—	—
	12	—	16	9	17	17	—	63	—	317
	—	—	6	6	—	4	—	—	—	—
	5	—	6	5	3	5	—	—	—	—
	1	—	3	3	1	2	—	—	—	—
	2	—	1	1	4	1	—	33	—	—
	6	—	3	3	—	5	3	24	15	143
	—	—	—	—	4	1	—	—	—	—
	2	1	1	8	5	6	—	—	—	—
	2	—	1	3	2	2	—	34	—	130
	1	—	—	1	—	4	—	—	—	—
	—	1	1	8	—	7	4	17	44	110
	12	—	8	7	5	9	—	—	—	—
	—	—	1	1	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
	117	10	203	144	155	231	95	666	336	3849

nurses.

No. of cases of insanitary conditions reported to Medical Officer of Health.	No. of Health Visitors.	
	Whole- time. (23)	Part- time.) (24)
(22)		
10	1	—
2	1	—
195	1	—
1	1	—
3	1	—
34	1	—
3	1	—
11	—	2
—	1	—
25	1	—
13	1	—
21	1	—
2	—	1
—	—	1
13	1	—
25	2	—
1	—	1
30	—	6†
3	—	2†
44	2	—
—	—	4†
—	—	2†
4	—	6†
5	—	†
5	—	4†
2	—	4
1	—	1†
—	—	5†
182	1	—
—	—	1
—	—	—
635	17	39